CLAIMS

1. A silica-containing conjugated diene rubber composition comprising a conjugated diene rubber - silica mixture (A) containing at least 30 wt% of toluene insoluble components obtainable by co-coagulating an aqueous dispersion or solution of conjugated diene rubber (a) having a glass transition temperature of -120 to 0°C with an aqueous dispersion of silica, blended with a conjugated diene rubber (b) having a glass transition temperature such that the difference in absolute value between the glass transition temperature of rubber (b) and that of rubber (a) is 3 to 100 °C.

2. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the conjugated diene rubber - silica mixture (A) contains 25 to 200 parts by weight of silica with respect to 100 parts by weight of conjugated diene rubber (a).

3. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the amount of silica contained in the conjugated diene rubber - silica mixture (A) is 80 wt% or smaller with respect to the entire toluene insoluble components in the conjugated

diene rubber -silica mixture (A).

4. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the conjugated diene rubber -silica mixture (A) is obtainable by a step of being heated to 50 to 220°C after co-coagulation, but before blending the conjugated diene rubber (b).

5. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the glass transition temperature of the conjugated diene rubber (a) is -80 to -15°C.

6. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the difference in absolute value between the glass transition temperature of conjugated diene rubber (b) and that of conjugated diene rubber (a) is 10 to 95°C.

7. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the conjugated diene rubber (a) comprises a rubber selected from natural rubber, styrene butadiene copolymer rubber and acrylonitrile butadiene copolymer rubber, and the

conjugated diene rubber (b) comprises a rubber selected from natural rubber, styrene butadiene copolymer rubber, polybutadiene rubber and polyisoprene rubber.

8. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the conjugated diene rubber (a) is a styrene butadiene copolymer rubber and the conjugated diene rubber (b) is a styrene butadiene copolymer rubber or polybutadiene rubber.

9. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the conjugated diene rubber (b) contains 1 to 200 parts by weight of filler with respect to 100 parts by weight of the conjugated diene rubber (b).

10. The silica-containing conjugated diene rubber composition as set forth in claim 1, wherein the weight ratio of the conjugated diene rubber (a) to the conjugated diene rubber (b) is 95:5 to 5:95.

11. A crosslinkable silica-containing conjugated diene rubber composition comprising the silica-containing conjugated diene rubber composition as set forth in claim

1, and further a crosslinking agent.

12. A molding made by molding and crosslinking the crosslinkable silica-containing conjugated diene rubber composition as set forth in claim 11.

13. A production method of a silica-containing conjugated diene rubber composition comprising:

a step of co-coagulating an aqueous dispersion or solution of the conjugated diene rubber (a) having a glass transition temperature of -120 to 0°C and an aqueous dispersion of silica to obtain a co-coagulated mass;

a step of heating said co-coagulated mass to 50 to 220°C to obtain a conjugated diene rubber - silica mixture (A) containing at least 30wt% of toluene insoluble components; and

a step of blending a conjugated diene rubber (b) with the conjugated diene rubber - silica mixture (A); said rubber (b) having a glass transition temperature such that the difference in absolute value between the glass transition temperature of rubber (b) and that of rubber (a) is 3 to 100°C.